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 I - Computer program product with interface layer for navigation system - has library of software functions which operate in conjunction with navigation system application software, isolating it from geographic data stored on medium, but intercepts requests
 C - S02 T01
 A - (NAVI-) NAVIGATION TECHNOLOGIES CORP
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 N -- EP-838771 A2 98.04.29 * (9821) E 33p G06F-017/30
 R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO
 SE SI
 - CA2219037 A 98.04.25 (9836) G08G-001/0968
 - JP10253367 A 98.09.25 (9849) 110 G01C-021/00
 P -- 97EP-308523 97.10.24
 - 97CA-2219037 97.10.23
 - 97JP-332263 97.10.27
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 B - EP-838771 A

The computer program product comprising an interface layer comprises device for accepting and processing requests for geographic data from the navigation application program, and

device for translating geographic data from the physical storage format and providing the geographic data to the navigation application program in a logical data model format.

The query logic executing device further comprises device for providing a cursor to the navigation application program in response to a request for geographic data from the navigation application program.

The cursor result includes multiple records and the cursor providing device is responsive to the translating device and adapted to receive the geographic data. The cursor provider further comprises device providing a first portion of the cursor in the logical data model format, and device providing an entity identifier to a first remainder of the cursor so that the first remainder is maintained in a compressed format.

ADVANTAGE - Retrieves geographic data from storage medium and converts data into format usable by navigation application software, and also provides for memory management that facilitates accessing and using geographic data from particular storage medium quickly and efficiently. By recognizing that different media types have different physical formats, data access interface layer accommodates and isolates differences so that portions of data access interface layer that interact with navigation application software can be generic. (Dwg.2/8)

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